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Drew Gant

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3673

27305

7590

02/21/2008

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EXAMINER

YABUT, DIANE D

ART UNIT

PAPER NUMBER

3734

MAIL DATE

DELIVERY MODE

02/21/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

This action is in response to applicant's amendment received 11/08/2007.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Trott** (U.S. Patent No. **5,729,904**) in view of **Lim** (U.S. Patent No. **5,658,304**).

Claim 28: Trott discloses a housing **12** having a body and a head **28** that extends forward from said body, said head having a face and a through bore, a driver **29** having a driven portion **20** disposed in said housing and configured to be attached to a drive unit and a locking portion disposed over said face of said head, said locking portion having a through opening aligned with said through bore, and at least one engaging member **32**, a pin **40** that extends through said bore and said through opening, said pin having a head portion disposed over said locking portion with said head portion having an opening (next to element **44**) aligned over and positioned to receive at least one engaging member, said pin being movably mounted to said housing so as to be able to move longitudinally in said through bore and said through opening, a cap **43** mounted to said pin so as to be spaced above said head portion of said pin to define a slot between said head portion and said cap for receiving a surgical saw blade, and a biasing

member **26** acting between said head of said housing and said pin for urging said head portion of said pin and said cap towards said at least one engaging member (Figures 1 and 6, col. 5, lines 1-63).

Trott discloses the claimed device except for the head portion defining an opening therethrough that is aligned over and positioned to receive said at least one engaging member.

Lim teaches a surgical saw blade coupler with a head portion **78** defining an opening **84** therethrough that is aligned over and positioned to receive said at least one engaging member **60** (Figures 1 and 5). It would have been obvious to one of ordinary skill in the art at the time of invention to modify Trott by providing the head portion with an opening, as taught by Lim, since this mating configuration produces a wrenchless and adapterless system without the necessity for auxiliary tools for securing a surgical blade to a powered handpiece, and decreases blade vibration induced by lateral loading on the blade (Lim, col. 3, lines 4-20).

3. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Trott** (U.S. Patent No. **5,729,904**) in view of **Lim** (U.S. Patent No. **5,658,304**), as applied to claim 28 above, and further in view of **Evans** (U.S. Patent No. **5,263,972**).

Claim 29: Trott and Lim disclose the claimed device, including said cap having a bottom face directed towards said pin (see Figure 1), except for at least one bore that opens inwardly from said bottom face, said at least one bore being aligned with said at

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least one engaging member and said opening in said head portion of said pin and dimensioned to receive said at least one engaging member, and said driver, said pin and said cap are collectively dimensioned so that when said biasing member urges said head portion of said pin and said cap towards said at least one engaging member, said at least one engaging member extends through said opening and said slot into said bore defined in said cap that has a bottom face directed towards a head portion of a pin.

Evans teaches a surgical handpiece chuck and blade with at least one bore **74** that opens inwardly from said bottom face of a cap **50** that has a bottom face directed towards a head portion **109** of a pin, said at least one bore being aligned with said at least one engaging member and said opening in said head portion of said pin and dimensioned to receive said at least one engaging member, and said driver, said pin and said cap are collectively dimensioned so that when said biasing member urges said head portion of said pin and said cap towards said at least one engaging member, said at least one engaging member extends through said opening and said blade slot into said bore defined in said cap (Figure 6). It would have been obvious to one of ordinary skill in the art at the time of invention to provide a bore that opens inwardly from a bottom face of a cap, as taught by Evans, to Trott and Lim since it was known in the art that chucks often top projecting elements and spindles or rotating rods and pins in order to better engage the blade member and maintain a secure connecting mechanism.

Response to Arguments

4. Applicant's arguments filed 11/08/2007 have been fully considered but they are not persuasive.

5. The applicant argues that the components referred to in Lim are not part of the coupler for holding a surgical saw blade, but rather are the parts of the actual blade itself. Applicant notes col. 5, lines 1-3 of Lim: "Blade 30, as shown in FIGS. 5 through 8, has a proximal hub end 70, a distal end 72 with an angled cutting surface 73 and an elongated body 74 extending therebetween." While this is evident in Lim, the examiner used the teaching of the collet mechanism 10 (Figure 1), or proximal coupling portion of the surgical saw blade 30, and was not referring to the distal cutting portion. The surgical saw blade has a collet mechanism that enables it to be coupled to a driver, including a head portion defining an opening therethrough that is aligned over and positioned to receive at least one engaging member, and therefore one of ordinary skill in the art would look to Lim to modify Trott.

6. In response to applicant's argument that one skilled in the art would not place a first blade into a collet for purposes of holding a second blade, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. As maintained above, it would have been obvious to one of ordinary skill in the art at the time of invention to provide the head portion with an opening, as taught by Lim, to Trott

since this mating configuration produces a wrenchless and adapterless system without the necessity for auxiliary tools for securing a surgical blade to a powered handpiece, and decreases blade vibration induced by lateral loading on the blade (col. 3, lines 4-20).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIANE YABUT whose telephone number is (571)272-6831. The examiner can normally be reached on M-F: 9AM-4PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Todd Manahan can be reached on (571) 272-4713. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Diane Yabut/

Examiner, Art Unit 3734

/Todd E Manahan/

Supervisory Patent Examiner, Art Unit 3731